



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application of

ELLIS et al

Atty. Ref.: 47-194

Serial No. 10/608,436

TC/A.U.: 1632

Filed: June 30, 2003

Examiner: Unassigned

For: PARASITE ANTIGENS

\* \* \* \* \*

March 10, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO-1449, a copy of each non-U.S. patent being enclosed. This is not to be construed as a representation that a search has been made or that no better prior art exists, or that a reference is relevant merely because cited.

The Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: Mary J. Wilson *Reg No 32955*  
(for) Leonard C. Mitchard  
Reg. No. 29,009

LCM:lfn  
1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

INFORMATION DISCLOSURE  
CITATION

ATTY. DOCKET NO.

SERIAL NO.

47-194

10/608,436

APPLICANT

ELLIS et al

FILING DATE

TC/A.U.

June 30, 2003

1632

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,110,898	08/2000	Malone et al			
	5,939,400	08/1999	Steinman et al			
	4,945,050	07/1990	Sanford et al			
	5,141,131	08/1992	Miller, Jr. et al			
	5,177,010	01/1993	Goldman et al			
	5,104,310	04/1992	Saltin			
	5,004,863	04/1991	Umbeck			
	5,159,135	10/1992	Umbeck			
	5,384,253	01/1995	Krzyzek et al			
	5,472,869	12/1995	Krzyzek et al			

## FOREIGN PATENT DOCUMENTS

DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
EP 0 953 641 A2	11/1999	EP			
WO 87/06614	11/1987	WIPO			
WO 93/21335	10/1993	WIPO			
WO 93/19183	09/1993	WIPO			
WO 95/20660	08/1995	WIPO			
WO 92/09696	06/1992	WIPO			

## OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

	Hoff, E.F. et al; "Toxoplasma gondii: Molecular Cloning and Characterization of a Novel 18-kDa Secretory Antigen, TgMIC10 <sup>1</sup> "; <i>Experimental Parasitology</i> ; <b>97</b> , pp. 77-88 (2001).
	Atkinson, R.A. et al; "Isolation of <i>Neospora caninum</i> Genes Detected During a Chronic Murine Infection"; <i>Int'l Journal for Parasitology</i> ; <b>31</b> , pp. 67-71 (2001).
	Kissinger, J.C. et al; "ToxoDB: accessing the <i>Toxoplasma gondii</i> genome"; <i>Nucl. Acids. Res.</i> , Kissinger et al <b>31</b> (1): 234, pp. 1-5.
	Salamov, A.A. et al; "Prediction of Protein Secondary Structure By Combining Nearest-neighbor Algorithms and Multiple Sequence Alignments"; <i>J. Mol. Biol.</i> , <b>247</b> , pp. 11-15 (1995).
	McAllister, M.M. et al; "Dogs are Definitive Hosts of <i>Neospora caninum</i> "; <i>Int'l Journal for Parasitology</i> ; <b>28</b> , pp. 1473-1478 (1998).
	Soldati, D. et al; "Complementation of a <i>Toxoplasma gondii</i> ROP1 Knock-out Mutant Using Phleomycin Selection"; <i>Molecular and Biochemical Parasitology</i> ; <b>74</b> , pp. 87-97 (1995).
	Howe, D.K. et al; "Expression of <i>Toxoplasma gondii</i> Genes in the Closely-related Apicomplexan Parasite <i>Neospora caninum</i> "; <i>Molecular and Biochemical Parasitology</i> ; <b>86</b> , pp. 29-36 (1997).
	Lally, N. et al; "A Dense Granule Protein (NCDG1) Gene from <i>Neospora caninum</i> <sup>1</sup> "; <i>Molecular and Biochemical Parasitology</i> ; <b>87</b> , pp. 239-243 (1997).
	Hood, E.E. et al; "Plant-based Production of Xenogenic Proteins"; <i>Current Opinion in Biotechnology</i> ; <b>10</b> :382-386 (1999).
	Knoll, L.J. et al; "Adaptation of Signature-tagged Mutagenesis for <i>Toxoplasma gondii</i> : A Negative Screening Strategy to Isolate Genes that are Essential in Restrictive Growth Conditions"; <i>Molecular &amp; Biochemical parasitology</i> ; <b>116</b> , pp. 11-16 (2001).
	Hemphill, A. et al; "Identification and Partial Characterization of a 36 kDa Surface Protein on <i>Neospora caninum</i> Tachyzoites"; <i>Parasitology</i> , <b>115</b> , pp. 371-380 (1997).

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

INFORMATION DISCLOSURE  
CITATION

ATTY. DOCKET NO.

SERIAL NO.

47-194

10/608,436

APPLICANT

ELLIS et al

FILING DATE

TC/A.U.

June 30, 2003

1632



(Use several sheets if necessary)

	Cunningham, B.C. et al; "High-Resolution Epitope Mapping of hGH-Receptor Interactions by Alanine-Scanning Mutagenesis"; <i>Science</i> , June 2, 1989; 244, 4908; ProQuest Medical Library, pg. 1081.
	Chakrabarti, P. et al; "C-H...O Hydrogen Bond Involving Proline Residues in $\alpha$ -Helices"; <i>J. Mol. Biol.</i> , <b>284</b> , pp. 867-873 (1998).
	Cohen, A.D. et al; "Modulating the Immune Response to Genetic Immunization"; <i>The FASEB Journal</i> , 12:1611-1626 (1998).
	Cesbron-Delauw, M.F. et al; "Molecular Characterization of a 23-kilodalton Major Antigen Secreted by <i>Toxoplasma gondii</i> "; <i>Proc. Natl. Acad. Sci. USA</i> ; Vol. <b>86</b> , pp. 7537-7541, October 1989.
	Atkinson, R. et al; "Comparison of the Biological Characteristics of Two Isolates of <i>Neospora Caninum</i> "; <i>Parasitology</i> , <b>118</b> , pp. 363-370, (1999).
	Mercier, C. et al; "Molecular Characterization of a Dense Granule Antigen (Gra 2) Associated with the Network of the Parasitophorous Vacuole in <i>Toxoplasma gondii</i> "; <i>Molecular and Biochemical Parasitology</i> , <b>58</b> , pp. 71-82 (1993).
	Lally, N.C. et al; "Evaluation of Two <i>Neospora caninum</i> Recombinant Antigens for Use in an Enzyme-Linked Immunosorbent Assay for the Diagnosis of Bovine Neosporosis"; <i>Clinical and Diagnostic Laboratory Immunology</i> , Vol. 3, No. 3, pp. 275-279, May 1996.
	Ellis, J.T. et al; "Isolation, Characterization and Expression of a <i>GRA2</i> Homologue from <i>Neospora Caninum</i> "; <i>Parasitology</i> , <b>120</b> , pp. 383-390 (2000).
	Wang, B. et al; "Gene Inoculation Generates Immune Responses Against Human Immunodeficiency Virus Type 1"; <i>Proc. Natl. Acad. Sci. USA</i> ; Vol. 90, pp. 4156-4160, May 1993.
	Xiang, Z.Q. et al; "Vaccination with a Plasmid Vector Carrying the Rabies Virus Glycoprotein Gene Induces Protective Immunity Against Rabies Virus"; <i>Virology</i> , <b>199</b> , pp. 132-149 (1994).
	Yang, K. et al; "Early Studies on DNA-based Immunizations for Measles Virus"; <i>Vaccine</i> , Vol. 15, No. 8, pp. 888-892 (1997).
	Sedegah, M. et al; "Protection Against Malaria by Immunization with Plasmid DNA Encoding Circumsporozoite Protein"; <i>Proc. Natl. Acad. Sci. USA</i> ; Vol. 91, pp. 9866-9870, October 1994.
	Modelska, A. et al; "Immunization Against Rabies with Plant-derived Antigen"; <i>Proc. Natl. Acad. Sci. USA</i> ; Vol. 95, pp. 2481-2485, March 1998.
	Montgomery, D.L. et al; "Heterologous and Homologous Protection Against Influenza A by DNA Vaccination: Optimization of DNA Vectors"; <i>DNA and Cell Biology</i> , Vol. 12, No. 9 (1993).
	Mason, H.S. et al; "Expression of Norwalk Virus Capsid Protein in Transgenic Tobacco and Potato and its Oral Immunogenicity in Mice"; <i>Proc. Natl. Acad. Sci. USA</i> ; Vol. 93, pp. 5335-5340, May 1996.
	Kapusta, J. et al; "A Plant-derived Edible Vaccine Against Hepatitis B Virus"; <i>The FASEB Journal</i> , Vol. 13, pp. 1796-1799, October 1999.
	Fynan, E.F. et al; "DNA Vaccines: Protective Immunizations by Parenteral, Mucosal, and Gene-gun Inoculations"; <i>Proc. Natl. Acad. Sci. USA</i> ; Vol. 90, pp. 11478-11482, December 1993.
	Eisenbraun, M.D. et al; "Examination of Parameters Affecting the Elicitation of Humoral Immune Responses by Particle Bombardment-Mediated Genetic Immunization"; <i>DNA and Cell Biology</i> ; Vol. 12, No. 9 (1993).
	Brennan, F.R. et al; "Chimeric Plant Virus Particles Administered Nasally or Orally Induce Systemic and Mucosal Immune Responses in Mice"; <i>Journal of Virology</i> , Vol. 73, No. 2, pp. 930-938, Feb. 1999.
	Cardoso, A.I. et al; "Immunization with Plasmid DNA Encoding for the Measles Virus Hemagglutinin and Nucleoprotein Leads to Humoral and Cell-Mediated Immunity"; <i>Virology</i> , <b>225</b> , pp. 293-299 (1996).
	Reichel, M.P. et al; "Control Options for <i>Neospora caninum</i> Infections in Cattle - Current State of Knowledge"; <i>New Zealand Veterinary Journal</i> ; <b>50</b> (3), pp. 86-92 (2002).
	Atkins, R. et al; "Progress in the Serodiagnosis of <i>Neospora Caninum</i> Infections of Cattle"; <i>Parasitology Today</i> , Vol. 16, No. 3 (2000).
	Atkinson R.A. et al; "Isolation of <i>Neospora caninum</i> Genes Detected During a Chronic Murine Infection"; <i>Int'l Journal for Parasitology</i> ; <b>31</b> pp. 67-71; (2001).

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

INFORMATION DISCLOSURE  
CITATION

ATTY. DOCKET NO.

SERIAL NO.

47-194

10/608,436

APPLICANT

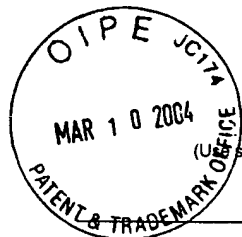
ELLIS et al

FILING DATE

TC/A.U.

June 30, 2003

1632



(Use several sheets if necessary)

	Ellis, J.T. et al; "Isolation, Characterization and Expression of a <i>GRA2</i> Homologue from <i>Neospora Caninum</i> "; <i>Parasitology</i> , <b>120</b> , pp 383-390 (2000).
	Ellis, J.T. et al; "DNA Cecaag Its Ic pact a Paraset 1 gy .... Parasetn C atr 1 Mnth g"; <i>DNA and Cell Biology</i> ; Vol. 22, No. 6 (2003).
	Stenlund, S. et al; "Characterization of a Swedish Bovine Isolate of <i>Neospora Caninum</i> "; <i>Parasitol Res.</i> , <b>83</b> , pp. 214-219 (1997).
	Sibley, L.D. et al; "Genetic Approaches to Studying Virulence and Pathogenesis in <i>Toxoplasma gondii</i> "; <i>Phil. Trans. R. Soc. Lond. B</i> , <b>357</b> , pp. 81-88 (2002).
	Prince, J.B. et al; "Cloning of cDNAs Encoding a 28 Kilodalton Antigen of <i>Toxoplasma Gondii</i> "; <i>Molecular and Biochemical Parasitology</i> , <b>34</b> pp. 3-14 (1989).
	Darcy, F. et al; "Induction of a Protective Antibody-Dependent Response Against Toxoplasmosis by <i>in Vitro</i> Excreted/Secreted Antigens from Tachyzoites of <i>Toxoplasma Gondii</i> "; <i>Parasite Immunology</i> , <b>10</b> , pp. 553-567 (1998).
	Barber, J.S. et al; "Characterization of the First European Isolate of <i>Neospora caninum</i> (Dubey, Carpenter, Speer, Topper and Ugglä)"; <i>Parasitology</i> , <b>111</b> , pp. 563-568 (1995).
	Howe, D.K. et al; "Development of Molecular Genetics for <i>Neospora caninum</i> : A Complementary System to <i>Toxoplasma gondii</i> "; <i>Methods: A Companion to Methods in Enzymology</i> , <b>13</b> , pp. 123-133 (1997).
	Dubey, J.P. et al; "Newly Recognized Fatal Protozoan Disease of Dogs"; <i>JAVMA</i> , Vol. 192, No. 9, May 1, 1988.
	Chou, P.Y. et al; "Structural and Functional Role of Leucine Residues in Proteins"; <i>J. Mol. Biol.</i> <b>74</b> , pp. 263-281 (1973).

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.